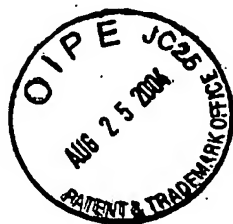


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## SUBSTITUTE SPECIFICATION

*Clean Copy*

### 5 IMAGE FORMING APPARATUS WITH ELECTROSTATIC POTENTIAL- BASED DEVELOPER CORRECTION

This application is a divisional of Application No. 09/873,292, filed June 5,  
2001, now U.S. Patent No. 6,665,502.

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#### BACKGROUND OF THE INVENTION

##### Field of the Invention

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The present invention relates to an image forming apparatus that uses an  
electrophotographic method or an electrostatic recording method. More  
particularly, the invention relates to an image forming apparatus, such as a copying  
machine, a printer, and a FAX, among some others.

##### Related Background Art

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Generally, a monocomponent developer using magnetic toner as the main  
components or two-component developer using non-magnetic toner and magnetic  
carrier as the main component thereof are used for the developing device that  
serves as developing means provided for an image forming apparatus using an  
electrophotographic method or an electrostatic recording means. For the image  
forming apparatus that forms full color or multicolor images by means of the  
electrophotographic method, in particular, most of the developing devices thereof  
adopt the two-component developer in consideration of color tones of images or  
the like.

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As is well known, the toner density (the ratio of toner weight to the total  
weight of carrier and toner) of the two-component developer is an extremely  
important factor for stabilizing the image quality. During development, the toner  
of a developer is consumed to reduce the toner density of the developer. Therefore,  
the toner density in a developer or image density should be detected timely in order  
to replenish toner depending on such changes. Then, the toner density or image  
density is controlled to be constant at all times for the maintenance of image  
quality.

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Here, conventionally, density control devices of various types have been  
proposed for the constant control of the toner density or image density by